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IN THE CLAIMS:

Please amend the claims as follows:

1-48. (cancelled)

49. (currently amended) A fuel cell comprising:

a ceramic support substrate supporting a cathode, anode and electrolyte; and

a plurality of pores formed through said substrate, said pores having a size that varies in diameter through a thickness of said substrate and shape formed in accordance with a pre-selected desired porosity.

50. (original) The fuel cell of claim 49, wherein said electrolyte is deposited in said pores.

51. (currently amended) A fuel cell comprising:

a support substrate supporting a cathode, anode and electrolyte; and

a plurality of pores formed through said substrate.

The fuel cell of claim 49, wherein said pores vary in diameter by tapering to a narrow point between two openings, both openings being larger than said narrow point along a thickness of said substrate.

52. (original) The fuel cell of claim 49, wherein said pores branch within said substrate.

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53. (currently amended) The fuel cell of ~~claim 38~~ claim 52, wherein branching of said pores results in a greater number of pore openings on a first side of said substrate than on a second side of said substrate.

54. (original) The fuel cell of claim 53, wherein said anode is disposed on said first side of said substrate and said cathode is disposed on said second side of said substrate.

55. (currently amended) The fuel cell of claim 49, wherein said pores are substantially uniform in size and shape ~~substrate comprises a ceramic~~.

56. (original) The fuel cell of claim 49, wherein said substrate comprises alumina.

57. (currently amended) The fuel cell of ~~claim 49~~ claim 55, wherein said substrate comprises a second plurality of substantially uniform pores formed through said substrate wherein an average size of said second plurality of pores is smaller than said first plurality of pores.

58. (currently amended) An apparatus comprising:
a ~~power consuming device~~;
a fuel cell configured for providing power to said device, said fuel cell comprising:

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a support substrate supporting a solid cathode material deposited on a first side of said substrate, a solid anode material deposited on a second side of said substrate and an electrolyte; and

a plurality of pores formed through said substrate, said pores having a size and shape formed in accordance with a pre-selected desired porosity.

59. (original) The apparatus of claim 58, wherein said electrolyte is deposited in said pores.

60. (original) The apparatus of claim 58, wherein said pores vary in diameter along a thickness of said substrate.

61. (original) The apparatus of claim 58, wherein said pores branch within said substrate.

62. (original) The apparatus of claim 61, wherein branching of said pores results in a greater number of pore openings on a first side of said substrate than on a second side of said substrate.

63. (original) The apparatus of claim 62, wherein said anode is disposed on said first side of said substrate and said cathode is disposed on said second side of said substrate.

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64. (original) The apparatus of claim 58, wherein said pores are formed in parallel through said substrate.

65. (original) The apparatus of claim 58, wherein said substrate comprises a ceramic.

66. (original) The apparatus of claim 58, wherein said substrate comprises alumina.

67. (original) The apparatus of claim 58, wherein said substrate comprises a second plurality of pores formed through said substrate wherein an average size of said second plurality of pores is smaller than said first plurality of pores.

68. (new) The fuel cell of claim 49, wherein said pores provide an open passageway through said substrate with said electrolyte being deposited on sides of interiors of said pores.

69. (new) The fuel cell of claim 68, wherein each pore comprises a layer in which said electrolyte is mixed with a material of said substrate, said layer being between said electrolyte said substrate.

70. (new) The fuel cell of claim 49, wherein said cathode comprises perovskite.

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71. (new) The fuel cell of claim 70, wherein said cathode comprises lanthanum manganite.

72. (new) The fuel cell of claim 49, wherein said anode comprises a ceramic/metal composite.

73. (new) The fuel cell of claim 72, wherein said anode comprises nickel and yttria-stabilized zirconia cermet.

74. (new) The fuel cell of claim 49, wherein said electrolyte comprises at a zirconia-based electrolyte.

75. (new) The fuel cell of claim 74, wherein said electrolyte comprises at least one of yttria-stabilized zirconia, gadolinium-doped ceria, $\text{Ba}_2\text{In}_2\text{O}_5$, or a (strontium, magnesium)-doped LaGaO_3 (LSGM).

76. (new) The apparatus of claim 58, wherein said fuel-cell is a single chamber fuel cell.

77. (new) The apparatus of claim 58, wherein said pores provide an open passageway through said substrate with said electrolyte being deposited on sides of interiors of said pores.

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78. (new) The apparatus of claim 77, wherein each pore comprises a layer in which said electrolyte is mixed with a material of said substrate, said layer being between said electrolyte said substrate.

79. (new) The apparatus of claim 58, wherein said cathode comprises perovskite.

80. (new) The apparatus of claim 79, wherein said cathode comprises lanthanum manganite.

81. (new) The apparatus of claim 58, wherein said anode comprises a ceramic/metal composite.

82. (new) The apparatus of claim 81, wherein said anode comprises nickel and yttria-stabilized zirconia cermet.

83. (new) The apparatus of claim 58, wherein said electrolyte comprises at a zirconia-based electrolyte.

84. (new) The apparatus of claim 83, wherein said electrolyte comprises at least one of yttria-stabilized zirconia, gadolinium-doped ceria, $\text{Ba}_2\text{In}_2\text{O}_5$, or a (strontium, magnesium)-doped LaGaO_3 (LSGM).